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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/891,064	06/25/2001	James M. Anderson	OCR-754.cip	9892
26850	7590 01/23/2003			
MARY M. KRINSKY, Ph. D., J.D. PATENT ATTORNEY 79 TRUMBULL STREET NEW HAVEN, CT 06511			EXAMINER	
			NOLAN, PATRICK J	
	, -		ART UNIT	PAPER NUMBER
			1644	(1
			DATE MAILED: 01/23/2003	4

Please find below and/or attached an Office communication concerning this application or proceeding.

Application No.

09/891,064

Applicant(s)

Anderson et al.

Office Action Summary

Examiner Patrick J. Nolan

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The MAILING DATE of this communication appears on the o	over sheet with the correspondence address			
Period for Reply				
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the				
mailing date of this communication. If the period for reply specified above is less than thirty (30) days, a reply within the statutory. If NO period for reply is specified above, the maximum statutory period will apply and will exp. Failure to reply within the set or extended period for reply will, by statute, cause the application. Any reply received by the Office later than three months after the mailing date of this communication patent term adjustment. See 37 CFR 1.704(b).	ire SIX (6) MONTHS from the mailing date of this communication. on to become ABANDONED (35 U.S.C. § 133).			
Status				
1) X Responsive to communication(s) filed on Nov 5, 2002				
a) ☐ This action is FINAL . 2b) 💢 This action is non-final.				
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11; 453 O.G. 213.				
Disposition of Claims				
4) X Claim(s) <u>1-20</u>	is/are pending in the application.			
4a) Of the above, claim(s) 4-20	is/are withdrawn from consideration.			
5)	is/are allowed.			
6) 💢 Claim(s) <u>1-3</u>	is/are rejected.			
7) Claim(s)				
8) Claims	are subject to restriction and/or election requirement.			
Application Papers				
9) \square The specification is objected to by the Examiner.				
10) ☐ The drawing(s) filed on is/are a) ☐ accepted or b) ☐ objected to by the Examiner.				
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).				
11) The proposed drawing correction filed on	is: a) \square approved b) \square disapproved by the Examiner.			
If approved, corrected drawings are required in reply to this Office action.				
12) The oath or declaration is objected to by the Examiner.				
Priority under 35 U.S.C. §§ 119 and 120				
13) Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).				
a) All b) Some* c) None of:				
1. Certified copies of the priority documents have been received.				
2. Certified copies of the priority documents have been received in Application No				
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).				
*See the attached detailed Office action for a list of the certification.				
14) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).				
a) ☐ The translation of the foreign language provisional application has been received. 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.				
Attachment(s)				
1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s).				
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) Notice of Informal Patent Application (PTO-152)				
3) X Information Disclosure Statement(s) (PTO-1449) Paper No(s)				

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Part III DETAILED ACTION

1. Claims 1-20 are pending.

2. Applicant's election with traverse of Group I, claims 1-3 in Paper No. 7 is acknowledged. The traversal is on the ground(s) that the inventions are separate and distinct. This is not found persuasive for reasons set forth in Paper No. 6.

The requirement is still deemed proper and is therefore made FINAL.

3. Accordingly, claims 4-20 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to non-elected inventions.

Double Patenting

A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. Miller v. Eagle Mfg. Co., 151 U.S. 186 (1894); In re Ockert, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and In re Vogel, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

The non-statutory double patenting rejection, whether of the obviousness-type or non-obviousness-type, is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent. In re Thorington, 418 F.2d 528, 163 USPQ 644 (CCPA 1969); In re Vogel, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); In re Van Ornum, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); In re Longi, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); and In re Goodman, 29 USPQ2d 2010 (Fed. Cir. 1993).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(b) and (c) may be used to overcome an actual or provisional rejection based on a non-statutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.78(d). Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 1-3 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,252,045. Although the conflicting claims are not identical, they are not patentably distinct from

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each other because the SEQ ID NO. 2 in the issued patent is a species to the genus claims recited in the instant application.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- 5. Claims 1-3 are rejected under 35 U.S.C. § 102(a) as being anticipated by Ando-Akatsura. (2 on the IDS submitted 12-10-01).

Ando-Akatsura teaches three sequences that are at least 60%, 80 and 90% homologous to SEQ ID NO. 2, see Figure 1, in particular. It is noted that Applicant's priority document provisional application No. 60/013,625 does not disclose SEQ ID NO. 2, therefore the effective filing date of the instant application is 3-14-97.

The prior art teachings anticipate the claimed invention.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 1-3 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

There is insufficient written description to show that Applicant was in possession of a polypeptide that is 60%, 80% or 90% identical to SEQ ID NO. 2. The claims are drawn to a genus of polypeptides that are not sufficiently described. Applicant has disclosed one polypeptide sequence. The specification fails to describe these genus polypeptide sequences. The full scope in Applicant's invention encompasses making any one of 20 changes to any one of 208 amino acids (20 known amino acids and 60% identity would allow one to change any one of upto 208 amino acids in a 522 amino acid protein). 208^{20} changes leads the full scope of Applicant claimed invention to be upto 2.3 X 10^{46} polypeptides. Does Applicant

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contend that the written description of one sequence describes a genus of 2.3 X 10⁴⁶ polypeptides, just because they have claimed the sequence? The Examiner disagrees. In The Regents of the University of California v. Eli Lilly and Company, 43 USPQ2d 1398, 1406 (Fed. Cir. 1997) the Court recognized that generic statements are not an adequate written description of the genus because it does not distinguish the claimed genus from others, except by function. Finally, the Court indicated that while applicants are not required to disclose every species encompassed within a genus, the description of a genus is achieved by the recitation of a representative number of DNA molecules, defined by nucleotide sequence, falling within the scope of the genus.

See the Written description guidelines from the Federal Register Vol. 66, No. 4, Friday January 5, 2001

For each claim drawn to a genus:

The written description requirement for a claimed genus may be satisfied through sufficient description of a representative number of species by actual reduction to practice, reduction to drawings, or by disclosure of relevant, identifying characteristics, i.e., structure or other physical and/or chemical properties, functional characteristics coupled with a known or disclosed correlation between function and structure, or by a combination of such identifying characteristics, sufficient to show the applicant was in possession of the claimed genus. A 'representative number of species'' means that the species which are adequately described are representative of the entire genus. Thus, when there is substantial variation within the genus, one must describe a sufficient variety of species to reflect the variation within the genus. On the other hand, there may be situations where one species adequately supports a genus. What constitutes a 'representative number'' is an inverse function of the skill and knowledge in the art. Satisfactory disclosure of a 'representative number' depends on whether one of skill in the art would recognize that the applicant was in possession of the necessary common attributes or features of the elements possessed by the members of the genus in view of the species disclosed. For inventions in an unpredictable art, adequate written description of a genus which embraces widely variant species cannot be achieved by disclosing only one species within the genus. Description of a representative number of species does not require the description to be of such specificity that it would provide individual support for each species that the genus embraces. If a representative number of adequately described

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species are not disclosed for a genus, the claim to that genus must be rejected as lacking adequate written description under 35 USC 112 1st paragraph.

- 7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick Nolan whose telephone number is (703) 305-1987. The examiner can normally be reached on Tuesday through Friday from 9:00 am to 5:30 pm.
- 8. If attempts to reach the examiner are unsuccessful, the examiner's supervisor, Christina Chan, can be reached at (703) 305-3973. The FAX number for our group, 1644, is (703) 305-7401. Any inquiry of a general nature relating to the status of this application or proceeding should be directed to the Group receptionist, whose telephone number is (703) 308-0196.

Patrick J. Nolan, Ph.D.

Primary Examiner, Group 1640

January 22, 2003

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